A STUDY OF PERIPHERAL NEUROPATHY IN CHRONIC KIDNEY DISEASE STAGE -5 AND IT'S OUTCOME AFTER KIDNEY TRANSPLANTATION.

KEYWORDS

Chronic kidney disease,Uremic peripheral neuropathy, Nerve conduction studies,Overt or subclinical neuropathy, Sensory nerve action potential,Compound motor action potential ,conduction velocities, Amplitude, Distal latency, Sural nerve , Tibial nerve, Median nerve.

ABSTRACT OF THE STUDY.

Amongst the many manifestations of Uremia, the most common is uremic peripheral neuropathy & its prevalence is about 60- 100% in those on dialysis. Even though many patients may not have overt symptoms or signs, electro-physiological abnormalities in Nerve conduction studies(NCS) may be detected in many patients indicating the presence of subclinical neuropathy. Maintenance Hemodialysis(MHD) slows the progression of neuropathy, but the abnormalities rarely improve. However renal transplantation is associated with rapid improvement in these neuro-physiological abnormalities within days and clinical improvement over months. This study aims to evaluate the prevalence of peripheral neuropathy(both overt and subclinical) in CKD stage -5 patients on HD through NCS and to assess the outcome of neuropathy after renal transplantation

by follow-up NCS. The study included 30 CKD patients on MHD, all of whom underwent clinical examination & NCS(Sensory & motor conduction studies of both upper limb & lower limbs). Twenty patients had evidence of peripheral neuropathy, majority of them had subclinical neuropathy .Post renal transplantation these 20 patients underwent follow-up NCS at at the end of first and third months.The analysis of results showed the predominant pattern of involvement was an axonopathy, sensory is involved more than motor , lower limb involvement is more than upperlimb. Comparison of results(Pre-transplant vs Post-transplant), showed the improvement of neuro-physiological abnormalities particularly nerve conduction velocities & amplitude of Sensory nerve action potential(SNAP) & Compound motor action potential(CMAP) in both lower limbs & upperlimb.